

Title (en)
USE OF C-TYPE NATRIURETIC PEPTIDE VARIANTS TO TREAT OSTEOARTHRITIS

Title (de)
VERWENDUNG VON NATRIURETISCHEN C-TYP-PEPTID-VARIANTEN ZUR BEHANDLUNG VON OSTEOARTHRITIS

Title (fr)
UTILISATION DE VARIANTS DU PEPTIDE NATRIURÉTIQUE DE TYPE C POUR TRAITER L'ARTHROSE

Publication
EP 4019038 A3 20220928 (EN)

Application
EP 21202207 A 20161208

Priority
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Abstract (en)
The disclosure relates to the use of variants of C-type natriuretic peptide (CNP) to treat osteoarthritis, to ameliorate one or more symptoms of osteoarthritis, and to treat disorders having an osteoarthritis component.

IPC 8 full level
A61K 38/22 (2006.01); **A61P 19/02** (2006.01)

CPC (source: EP IL KR RU US)
A61K 9/19 (2013.01 - IL US); **A61K 31/573** (2013.01 - EP IL US); **A61K 31/728** (2013.01 - EP IL US); **A61K 38/22** (2013.01 - EP IL KR RU US); **A61K 38/2242** (2013.01 - IL US); **A61P 19/02** (2018.01 - EP IL KR US); **C07K 14/58** (2013.01 - IL KR US)

Citation (search report)
• [IY] EP 1759710 A1 20070307 - NAKAO KAZUWA [JP], et al
• [IY] KR 20070017366 A 20070209
• [XYI] US 2010297021 A1 20101125 - WENDT DANIEL J [US], et al
• [I] WO 2009067639 A2 20090528 - BIOMARIN PHARM INC [US], et al
• [A] EP 1743653 A1 20070117 - NAKAO KAZUWA [JP]
• [I] NICK J. PEAKE ET AL: "Controlled Release of C-Type Natriuretic Peptide by Microencapsulation Dampens Proinflammatory Effects Induced by IL-1[beta] in Cartilage Explants", BIOMACROMOLECULES, vol. 16, no. 2, 9 February 2015 (2015-02-09), pages 524 - 531, XP055376920, ISSN: 1525-7797, DOI: 10.1021/bm501575w
• [A] N.J. PEAKE ET AL: "C-type natriuretic peptide signalling drives homeostatic effects in human chondrocytes", BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 465, no. 4, 1 October 2015 (2015-10-01), AMSTERDAM, NL, pages 784 - 789, XP055376916, ISSN: 0006-291X, DOI: 10.1016/j.bbrc.2015.08.087
• [A] HÜLYA BÜKÜLMEZ ET AL: "Protective Effects of C-Type Natriuretic Peptide on Linear Growth and Articular Cartilage Integrity in a Mouse Model of Inflammatory Arthritis : C-Type Natriuretic Peptide Protects Cartilage During Arthritis", ARTHRITIS & RHEUMATOLOGY (HOBOKEN), vol. 66, no. 1, 30 December 2013 (2013-12-30), US, pages 78 - 89, XP055376923, ISSN: 2326-5191, DOI: 10.1002/art.38199

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WO 2017100400 A2 20170615; WO 2017100400 A3 20171026; AU 2016365751 A1 20180621; AU 2016365751 B2 20231221; AU 2024201852 A1 20240411; CA 3007315 A1 20170615; CN 108697766 A 20181023; DK 3386531 T3 20220103; EP 3386531 A2 20181017; EP 3386531 B1 20211013; EP 4019038 A2 20220629; EP 4019038 A3 20220928; ES 2901769 T3 20220323; HR P20211908 T1 20220304; HU E057083 T2 20220428; IL 259690 A 20180731; IL 259690 B 20221001; IL 259690 B2 20230201; JP 2019505486 A 20190228; JP 7104625 B2 20220721; KR 20180088459 A 20180803; MX 2018006986 A 20180905; PL 3386531 T3 20220228; PT 3386531 T 20211229; RU 2018124600 A 20200113; RU 2018124600 A3 20200113; RU 2021132347 A 20220324; RU 2759679 C2 20211116; US 11202819 B2 20211221; US 2019247467 A1 20190815; US 2022160836 A1 20220526

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US 2016065520 W 20161208; AU 2016365751 A 20161208; AU 2024201852 A 20240321; CA 3007315 A 20161208; CN 201680081329 A 20161208; DK 16852866 T 20161208; EP 16852866 A 20161208; EP 21202207 A 20161208; ES 16852866 T 20161208; HR P20211908 T 20161208; HU E16852866 A 20161208; IL 25969018 A 20180529; JP 2018530079 A 20161208; KR 20187019166 A 20161208; MX 2018006986 A 20161208; PL 16852866 T 20161208; PT 16852866 T 20161208; RU 2018124600 A 20161208; RU 2021132347 A 20161208; US 201615779049 A 20161208; US 202117541992 A 20211203